



# 01-T2 MineMobs Tower Defense

 Block by Block 

 Pop Pop Pop 



NOT AN OFFICIAL MINECRAFT PRODUCT  
NOT ASSOCIATED WITH MOJANG OR MICROSOFT

# Overview

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The background of the image features a dark gray field with four overlapping circles in two shades of blue. A horizontal white band cuts across the middle of the circles. The word "GitHub" is centered within this white band.

**GitHub**

# GitHub Home Page

<b>Development Timeline</b>
<ul style="list-style-type: none"><li>• <a href="#">Gantt Chart - 2025 April 13th</a></li><li>• <a href="#">Game Design Document - 2025 February 10th</a></li><li>• <a href="#">Milestone 1 - 2025 February 10th</a></li><li>• <a href="#">Milestone 2 - 2025 March 17th</a></li><li>• <a href="#">(WIP) Milestone 3 - 2025 April 13th</a></li></ul>
<b>Resources</b>
<b>Dependencies</b>
<ul style="list-style-type: none"><li>• <a href="#">PartiesAPI Plugin</a></li><li>• <a href="#">PlaceholderAPI Plugin</a></li><li>• <a href="#">SimpleScore Plugin</a> - (Only required if not using a custom scoreboard)</li></ul>
<b>All Resources</b>
<ul style="list-style-type: none"><li>• <a href="#">IntelliJ Community Edition</a></li><li>• <a href="#">IntelliJ Minecraft Development Plugin</a></li><li>• <a href="#">Spigot Development Guide</a></li><li>• <a href="#">Paper Development Guide</a></li><li>• <a href="#">GitHub</a></li><li>• <a href="#">PartiesAPI Plugin</a></li><li>• <a href="#">PlaceholderAPI Plugin</a></li><li>• <a href="#">WorldEdit Plugin</a></li><li>• <a href="#">SimpleScore Plugin</a></li></ul>

## Introduction to Senior Capstone - KSU Blocks Tower Defense

### Meet Our Team

### Programming/Development

### Documentation

### Design

### Final Report

### Artifacts

### Development Timeline

### Resources

### Dependencies

## GitHub acts as our primary Website.

- Provides Information on the team, KSU's identification for our project, and professor/sponsor information
- Contains all documents for our professor's reports
- Contains all presentation and documentation for our sponsor
  - Including this power point!
- List of Dependencies & Resources used throughout the project

## ▼ Home

### 【KSUBlocks Tower Defense】

- ★ What is KSUBlocks Tower Defense?
- ★ Basic Rules & Mechanics
- ★ More Information for Players
- ★ More Information for Admins
- ★ Development



## GitHub Wiki – Home Page

- Contains a brief of the Minecraft Plugin and a basic introduction to the game
- Discusses the rules of the Game: Notably, hearts, mobs, what the players have, and leaderboards.
- Provides a brief on the other three pages and all of their topics



# GitHub Wiki

## Player Information

- Details everything the player can do
  - Upgrading and enchanting swords
  - Applying effects on the Player
- Towers & provides their stats
- Mob information & brief Description
- Commands
- Tips & Tricks

## ▷ .jar Installation

1. Download the plugin as a .jar file
2. Drop the .jar file into your server's plugins folder
  - Upon server startup, the plugin should be enabled
  - If the server is already running when installed, operators can run `"/reload confirm"` to recompile the server and enable the plugin

## ▷ Manual Compilation

1. Compile the plugin (IntelliJ)
  - Open the project in the IDE, select the file option at the top left of the screen, select 'Project Structure,' then under 'Project Settings,' select 'Artifacts'
  - Create a new artifact with the plus sign (+) at the top-left of the window, selecting it as a JAR file, also 'From modules with dependencies...,' and then selecting OK at the bottom of the pop-up
  - Check the 'Output directory' and then click OK

# GitHub Wiki – Admin Information

## • Installation

- .Jar
- Manual

## • Config.yml

- Upgrades
- Economy

## • Commands

- `/Party`
- `/TDMAP`
- `/Apply-Upgrade`

## • Map Creation

- Steps on how to create a map and implement mob pathing





## Ideas

(Complete)

making tower's mask transparent

clear paths for towers

ty

recently designed for Paper Servers on Minecraft Java

## GitHub Wiki – Development

- Known Bugs
- Upcoming changes to our project
- Incomplete Ideas (Such as the End Map)
- Compatibility (Currently just noting that it was designed for Paper Java 1.21.4)



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**Finalized Project**

**INTRO/ABSTRACT**

Our project, **KSUBlocks Tower Defense**, is a **Minecraft Plugin** designed to create a **game mode** in the **Tower Defense genre**. We aim to create a unique and fun game for the students in the **KSU Minecraft server**. Our project is entirely configurable, allowing for easy maintenance and room for future expansions while ensuring the server performance remains steady alongside KSU's other game modes. It is developed in Java, utilizing IntelliJ and Paper API. We plan to deploy it on the KSU Minecraft Server upon finalization.

**METHODS**

A **GitHub** organization account was used for the project's version control and to allow all team member's access.



As used by Minecraft and Paper servers, **Java** was chosen as our language. **IntelliJ's IDE** and **IntelliJ MC Dev Plugin** formed the basis of our plugin.



**Paper API Framework** allows plugins to create GUIs, use built-in functions, and adapt event, adventure, and entity APIs' game behavior.



**SQLite** forms our Database, allowing us to collect user concurrency and game data for our leaderboard's system.

**Parties** creates teams, allowing for modified game rules and mechanics for multiplayer

**RESULTS**

Our plugin was developed to the needs of the KSU MC Server. It is lightweight, entirely modifiable, and leaves room for further development in the form of new maps, enemies, and player tools.

# KSU MC Server Exclusive: KSUBlocks Tower Defense



Finalized Project – GitHub Showcase

# Live Showcase!



Finalized Project – Code & Showcase

**Live Showcase!**

# Questions and Feedback?

